



# CORRECTIONAL FACILITY

KELLY R SAGER

CAN RECIDIVISM BE INFLUENCED BY ARCHITECTURE?



# THESIS ABSTRACT

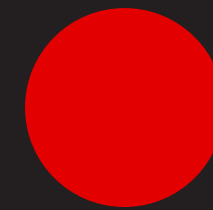
THIS THESIS WILL FOCUS ON AN INVESTIGATION OF THE QUESTION, **CAN RECIDIVISM BE INFLUENCED BY ARCHITECTURE?**

THE TYPOLOGY FOR THIS EXAMINATION WILL BE A MULTI-COUNTY CORRECTIONAL FACILITY FOR UP TO 290 CONVICTED CRIMINALS. THE THEORETICAL PREMISE THAT GUIDES THE RESEARCH IS, THE ABILITY TO INFLUENCE THE REHABILITATION OF THE INMATES, A MECHANISM TO CHANGE THE ENVIRONMENT FOR WHICH PRISONERS LIVE, ATTEMPT TO LOWER THE LEVEL OF VIOLENCE, AND ULTIMATELY TO LOWER THE CASES OF RETURN OFFENDERS. IT IS ESSENTIAL TO PROVIDE A SAFE WORK ENVIRONMENT FOR THE LAW ENFORCEMENT OFFICERS TOO, AS THEY SUPERVISE THE REHABILITATION OF THE INMATES AS THEY TRANSITION THROUGH THE INCARCERATED PROCESS.

# MY MOTIVATION

MY INTEREST IN THIS PARTICULAR TYPOLOGY IS PERSONAL; MY FATHER IS A RETIRED CAPTAIN OF THE NORTH DAKOTA HIGHWAY PATROL AND RETIRED FBI. AS THE DAUGHTER OF A STATE TROOPER, I LEARNED FIRST HAND, AT AN EARLY AGE, THE PRIDE AND RESPECT THE JOB DEMANDED AND THE DANGERS INVOLVED WITH HIS WORK EVERY DAY. HE DEALT WITH MANY LIFE THREATENING SITUATIONS THRU THE YEARS. IT IS IMPORTANT TO ME TO MAKE DESIGN CHOICES TO MINIMIZE THE DANGER TO THE INMATES, BUT ALSO THE OFFICERS AND STAFF THAT DIRECT THEM. IN DOING SO, THE ULTIMATE GOAL OF MY DESIGN WOULD BE TO MINIMIZE THE VIOLENCE THAT HAPPENS IN THESE FACILITIES. INTRODUCING DIRECT SUPERVISION IN A POD ARRANGEMENT, THERE IS ONE- ON-ONE CONTACT BETWEEN THE STAFF AND INMATES REGULARLY. A MUTUAL RESPECT CAN BE ACHIEVED AND THE INMATE HAS AN OPPORTUNITY TO SHARE AND INTERACT WITH THE STAFF.

## SITE LOCATION

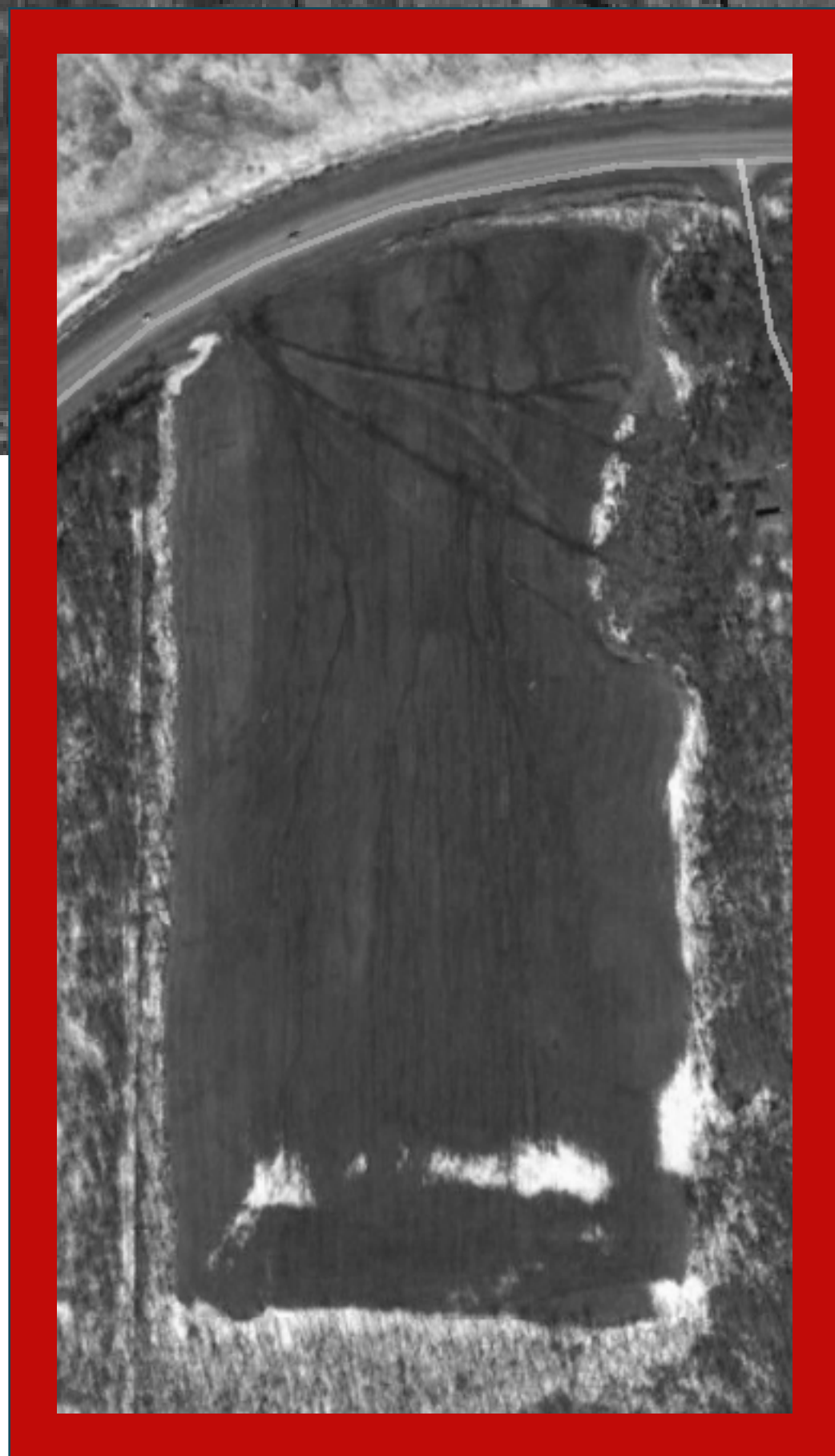


LATITUDE: 4.99841'N LONGITUDE: 98.91738' W

I HAVE CAREFULLY CHOSEN A SITE THAT HAS RECENTLY BEEN RECLAIMED. THE ORIGINAL STEEP TOPOGRAPHY HAS BEEN EXCAVATED IN THE LAST 10 YEARS TO PROVIDE CLAY TO BE USED IN THE RAISING OF THE ROADS IN THE SURROUNDING LAKE REGION, WHICH HAVE BEEN DEVASTATED BY FLOOD WATER FROM THE DEVILS LAKE. WHAT REMAINS TODAY AFTER CAREFUL EXCAVATION, IS A BEAUTIFUL, SCENIC, LEVEL PIECE OF LAND, SURROUNDED ON THREE SIDES WITH A BLUFF FILLED WITH MATURE NATIVE TREES AND A SPECTACULAR VIEW OF THE LAKE.

LOCATED JUST SEVEN MILES SOUTH OF DEVILS LAKE, ND, IN BENSON COUNTY THIS SITE PROVIDES EXCEPTIONAL ACCESS ON HIGHWAY 57, WHICH IS A MAJOR AXIS THROUGH THE LAKE REGION AREA AND CONNECTS TO ADDITIONAL COUNTIES THAT WILL ALSO USE THE FACILITY. THE CLOSE PROXIMITY TO DEVILS LAKE IS ESSENTIAL FOR ADDITIONAL SERVICES THAT MAY BE NEEDED WHILE MAINTAINING AN ACCEPTABLE DISTANCE FROM THE GENERAL POPULATION.





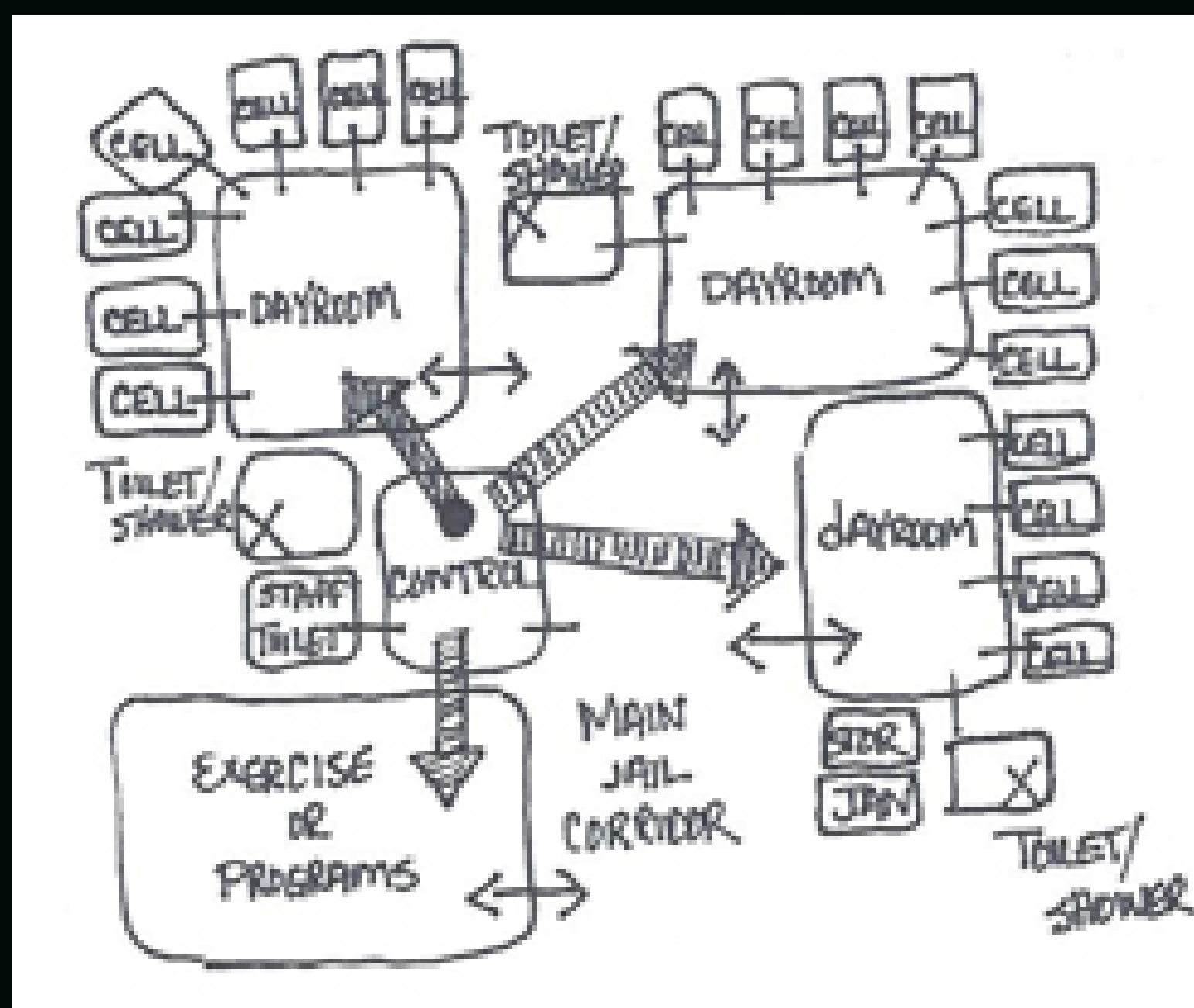
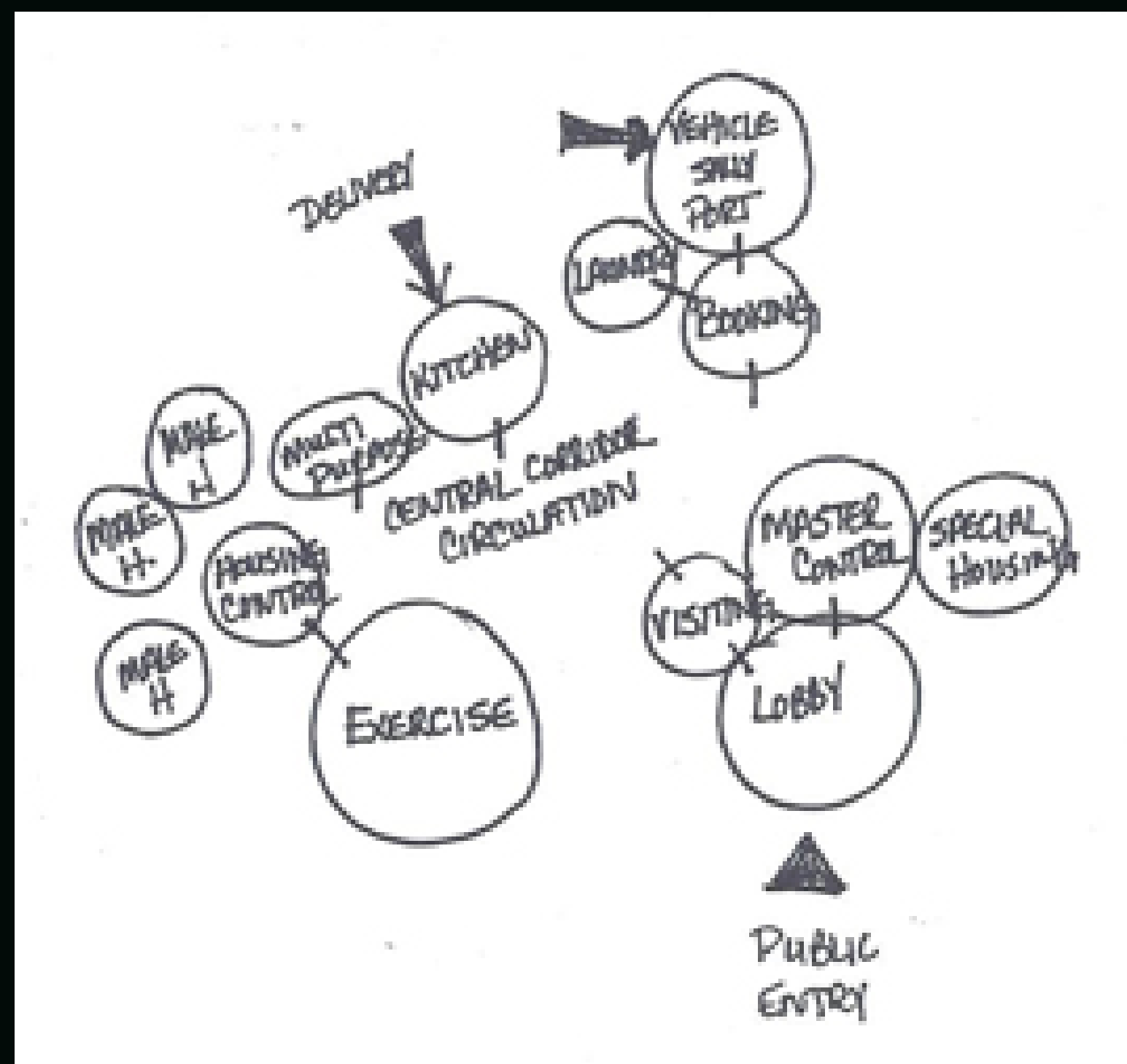
CURRENT LAKE LEVEL: 1453.41 FT  
SITE ELEVATION LEVEL: 1510 FT.



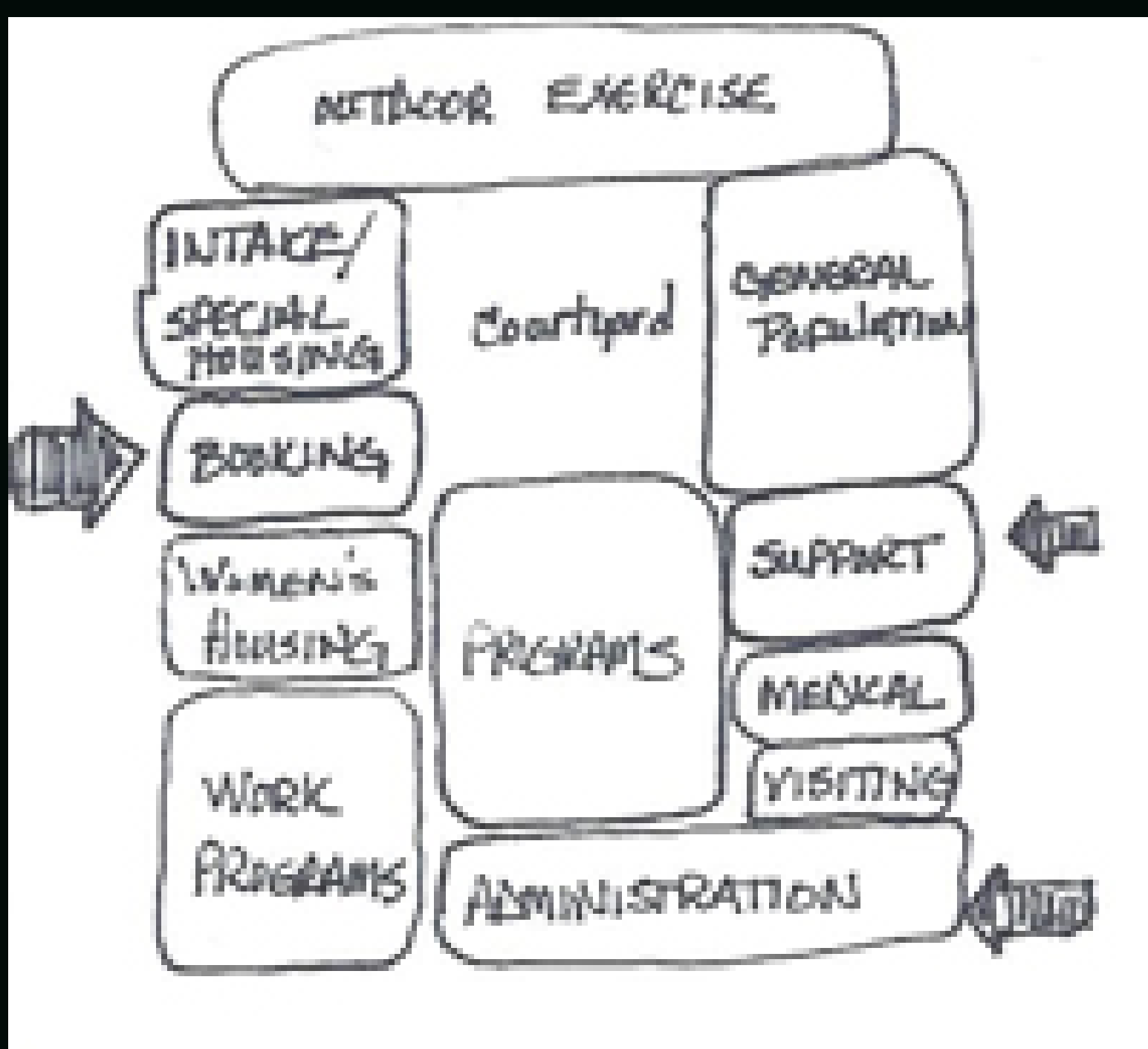


SITE PHOTOGRAPHY DEVILS LAKE, ND

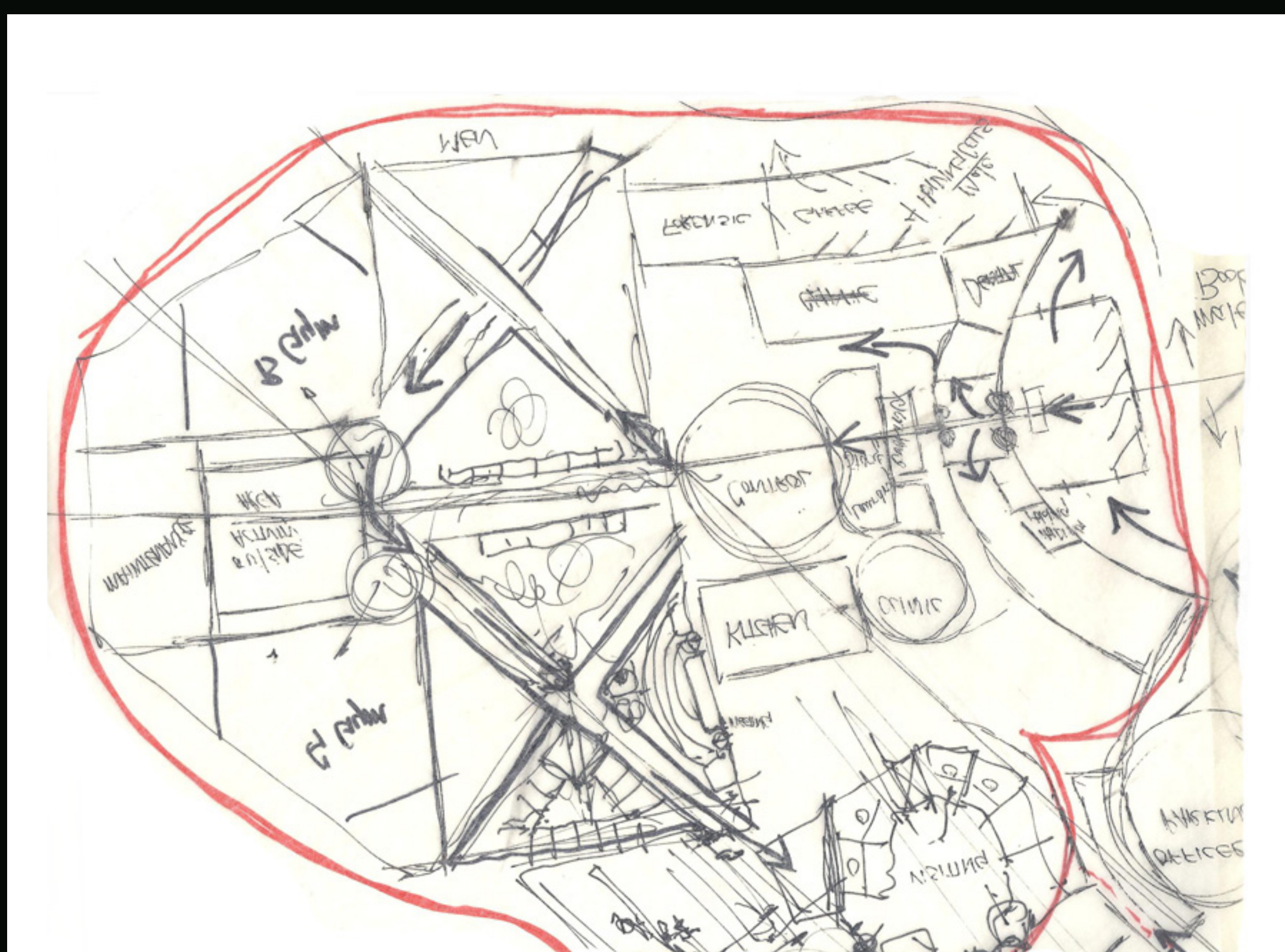
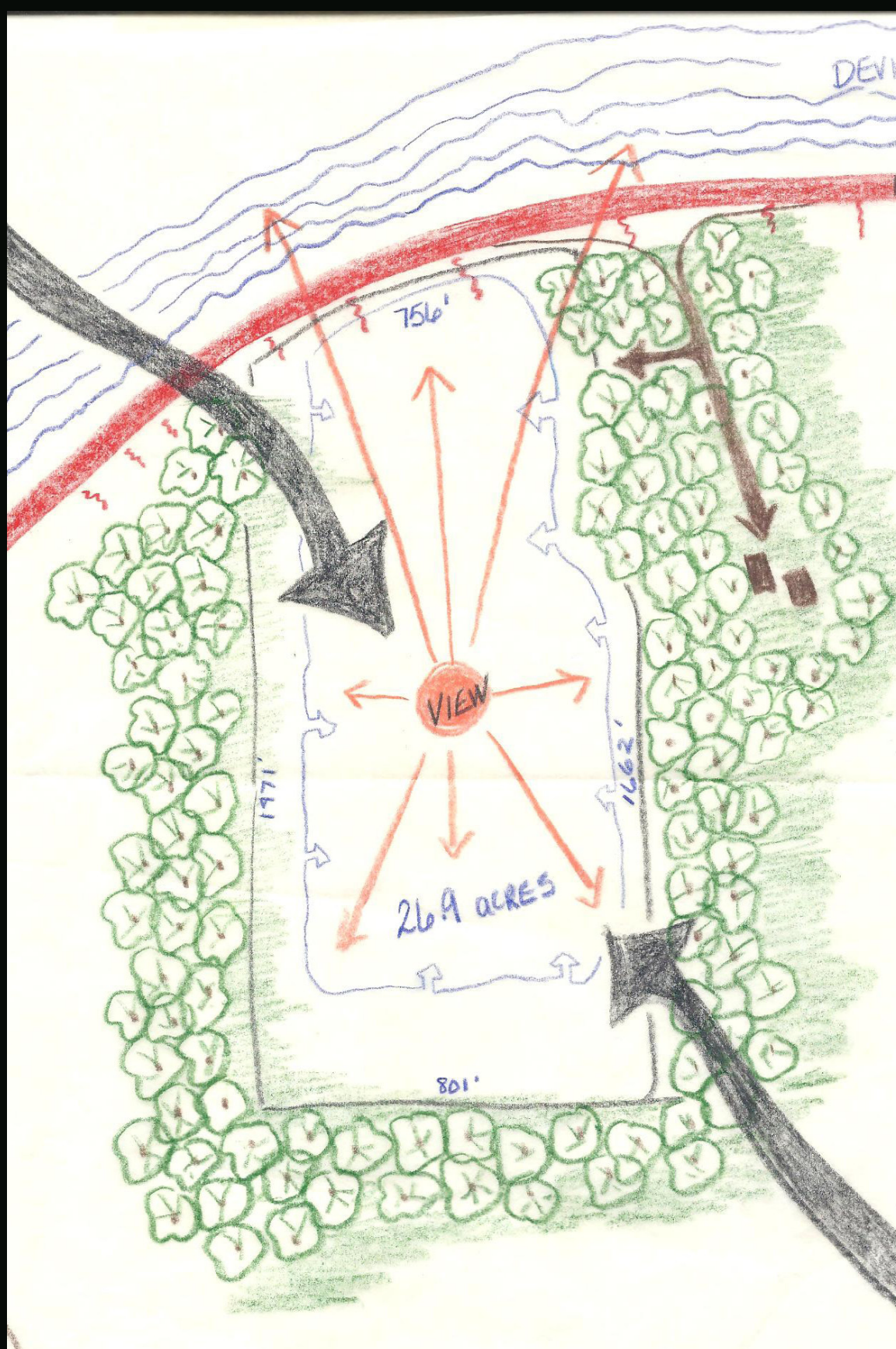
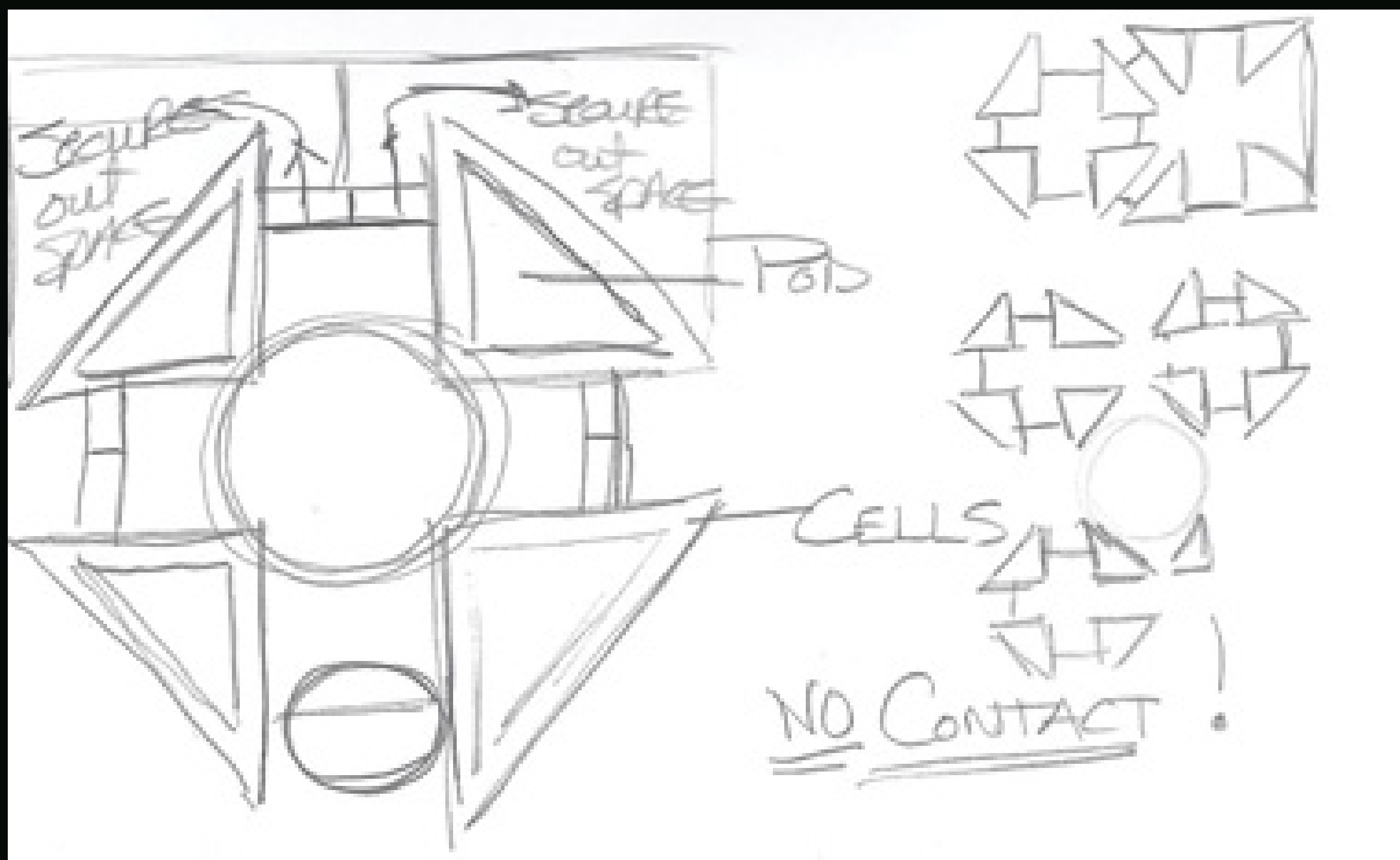
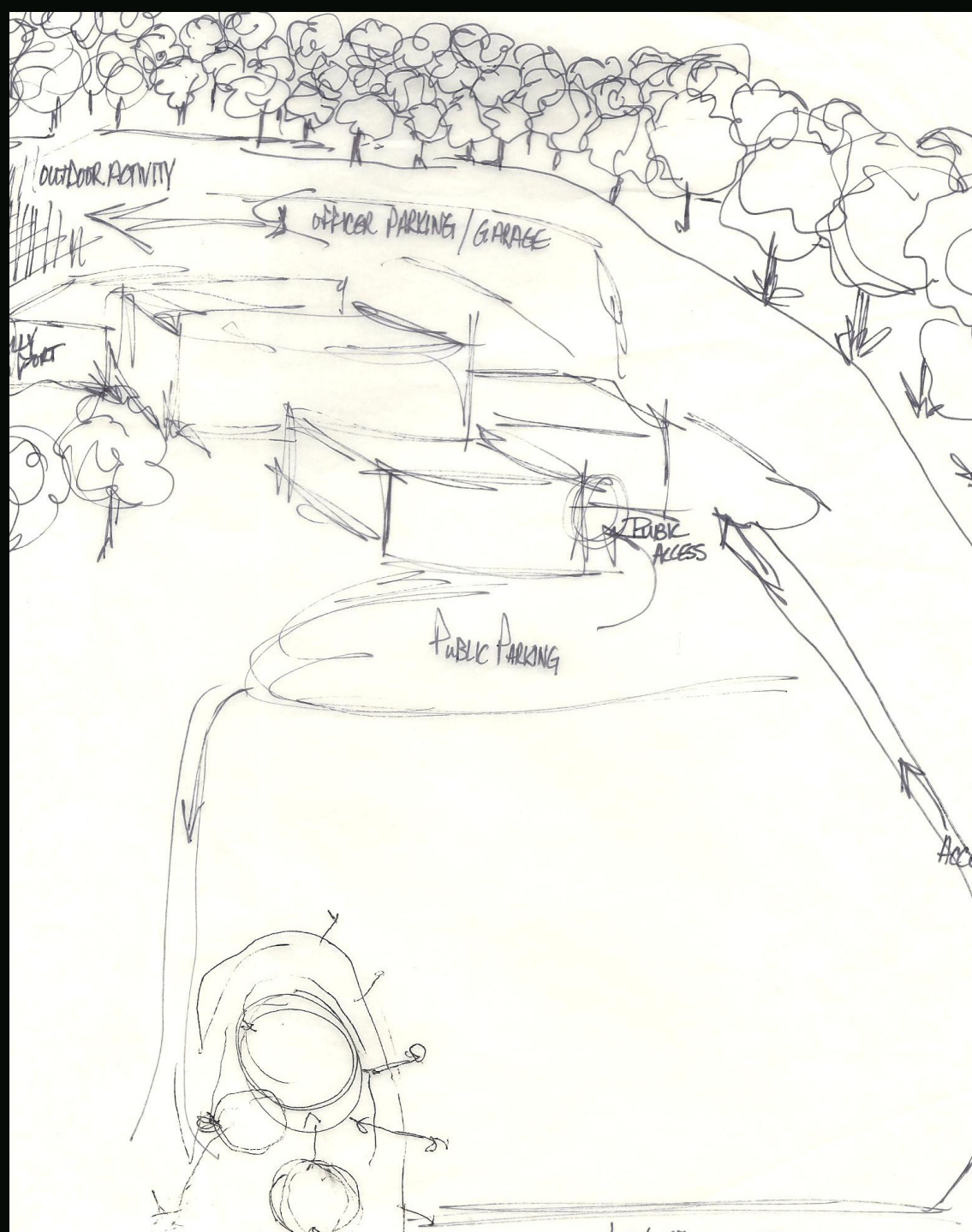




## BUBBLE DIAGRAMS

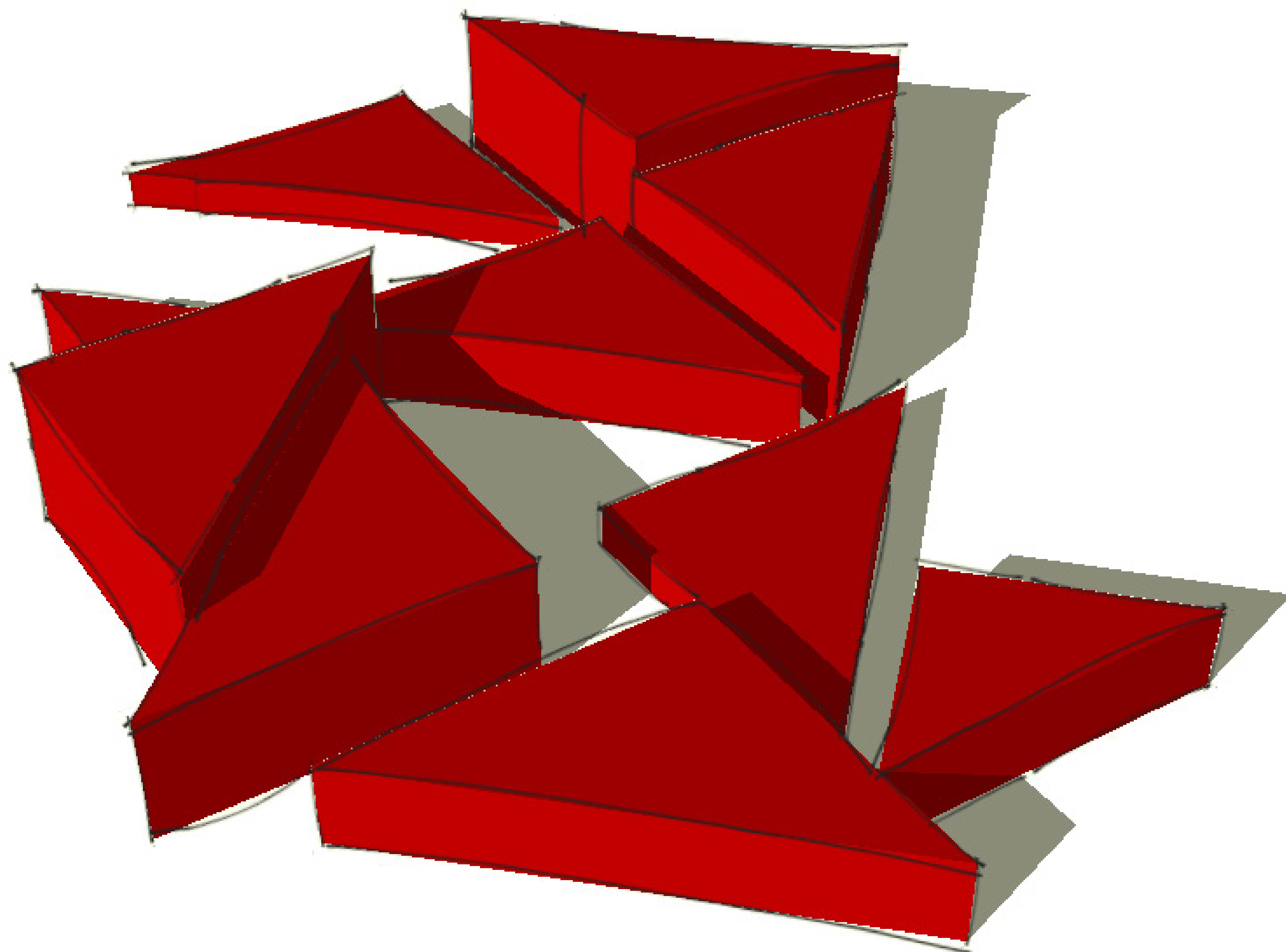






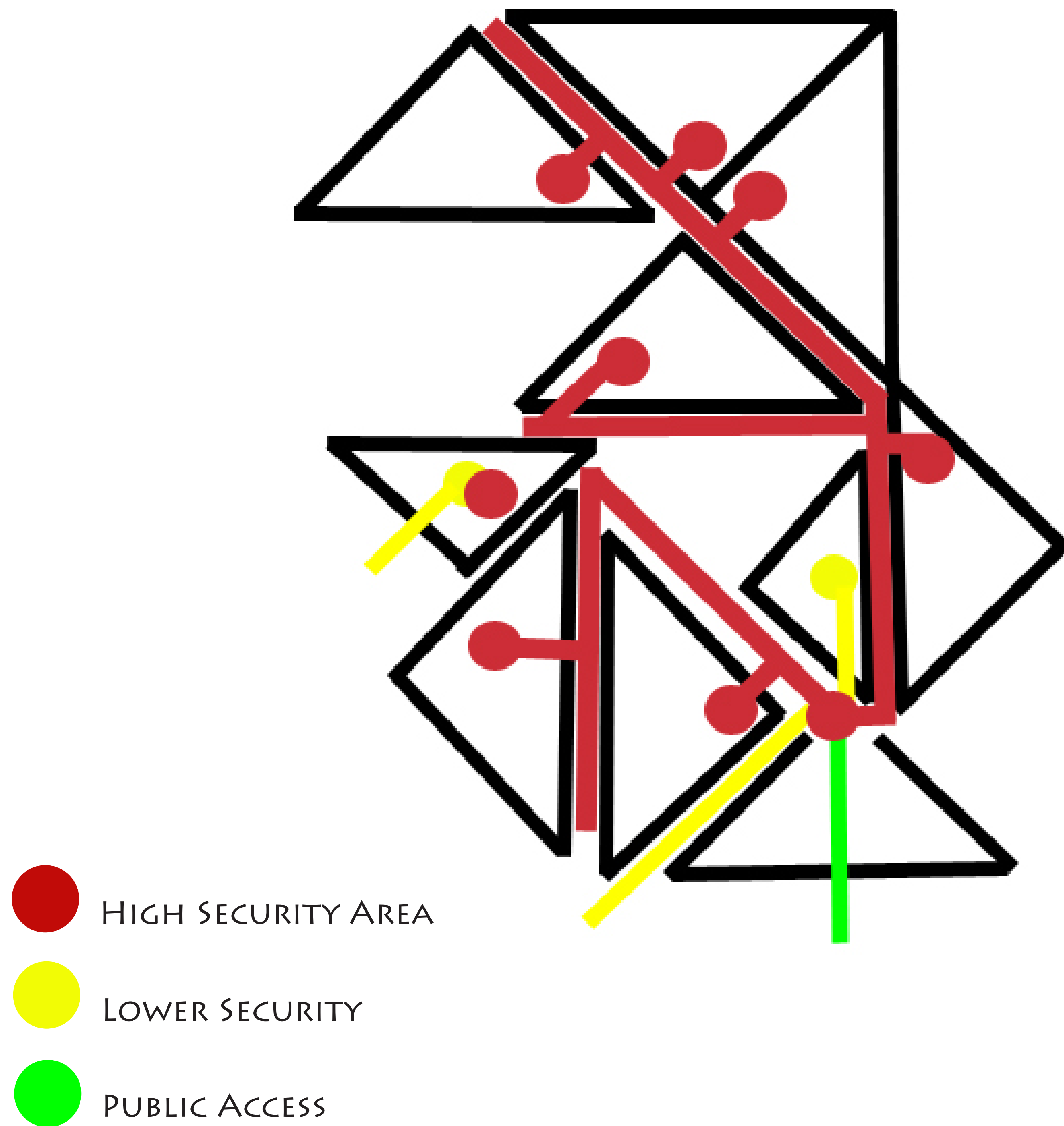
PROCESS





SPACIAL ANALYSIS





## CIRCULATION ANALYSIS





## PRISONER ARRIVAL

PRISONERS ARRIVE AT THE CORRECTIONAL FACILITY ON THE EAST SIDE OF THE BUILDING. THE GENERAL PUBLIC ARRIVES ON A SEPARATE ACCESS FROM THE WEST SIDE. THE GARAGE OR SALLY PORT IS DESIGNED TO NOT BE VISIBLE FROM THE HIGHWAY. THE NATURAL CONTOURS OF THE SITE AND UTILIZING THE BLUFF AND TREES, ALL CREATE LOW OR NO VISIBILITY TO THE ENTRANCE. SECURITY IS ESSENTIAL. ONCE THE PRISONER IS SECURED IN THE FACILITY, HOLDING AREAS FOR DETOX, EVALUATION AND CONSULTATIONS, BOOKING AND FINGERPRINTING ARE IMMEDIATELY AVAILABLE. MEDICAL FACILITIES ARE ADJACENT.



# RESEARCH: EXISTING PRISONER ARRIVAL



CASS COUNTY JAIL SALLY PORT

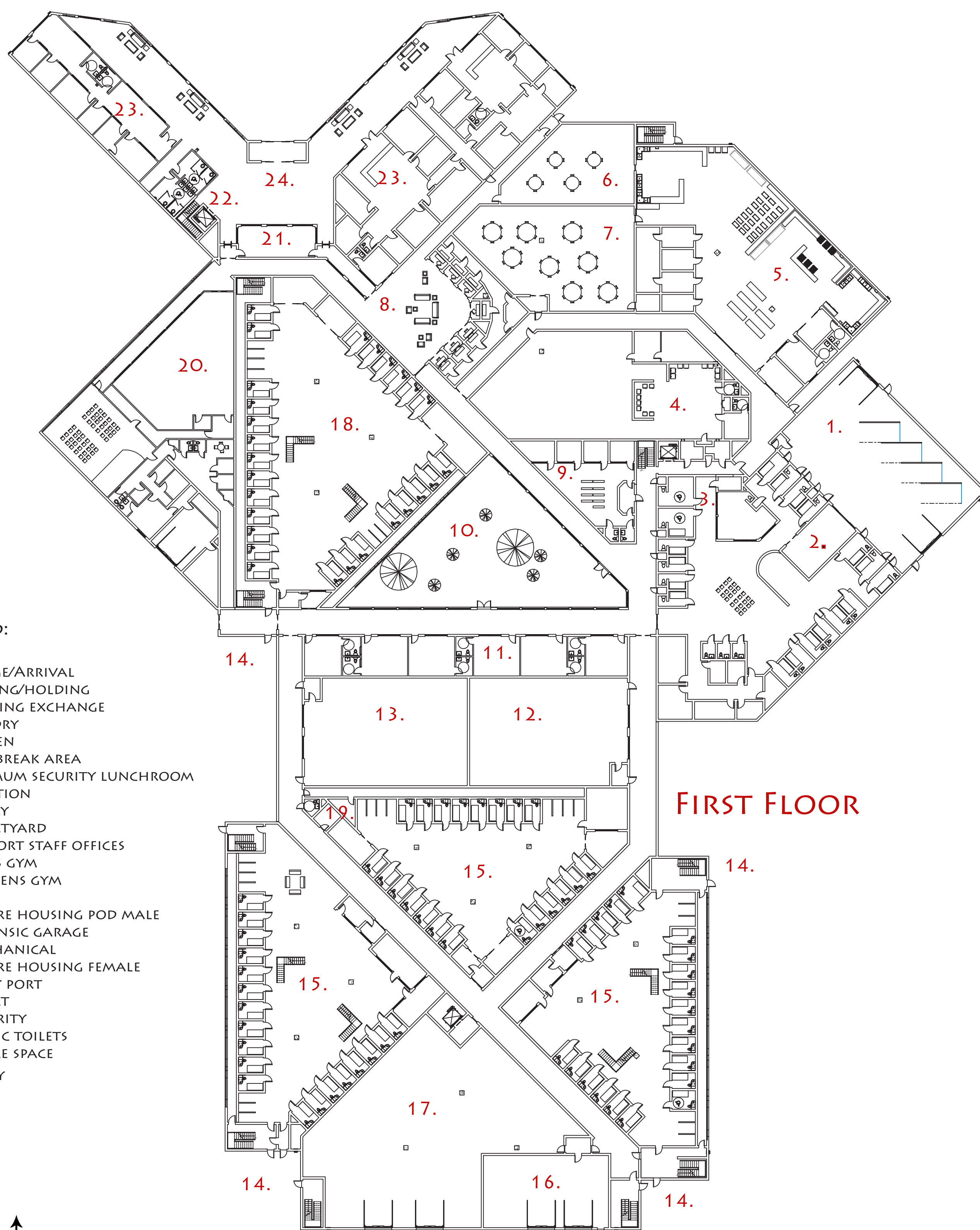


DETOX AND HOLDING



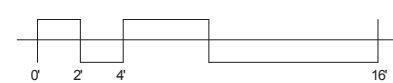
RAMSEY COUNTY BOOKING



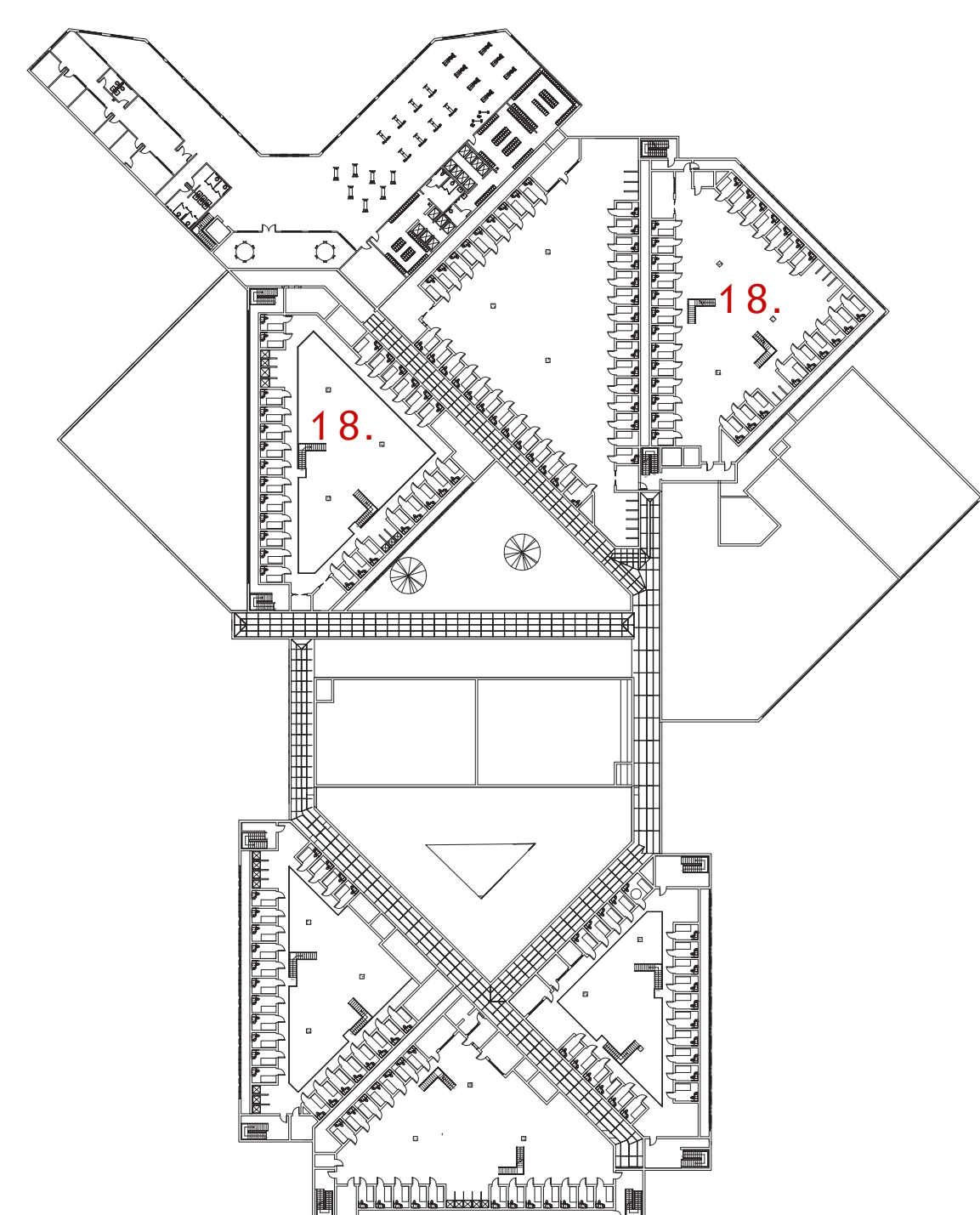


LEGEND:

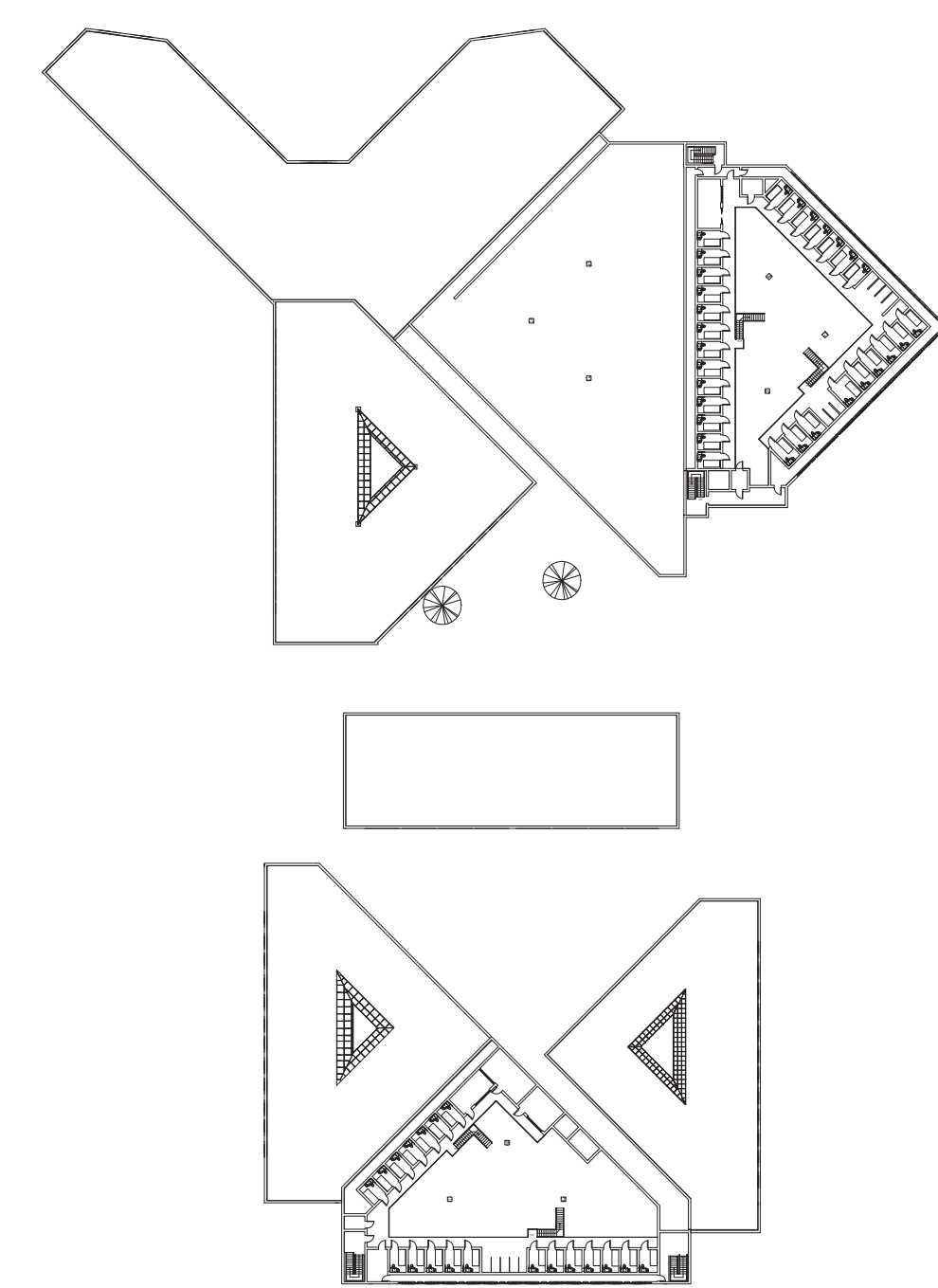
- 1. GARAGE/ARRIVAL
- 2. BOOKING/HOLDING
- 3. CLOTHING EXCHANGE
- 4. LAUNDRY
- 5. KITCHEN
- 6. STAFF BREAK AREA
- 7. MINIMUM SECURITY LUNCHROOM
- 8. VISITATION
- 9. LIBRARY
- 10. COURTYARD
- 11. SUPPORT STAFF OFFICES
- 12. MENS GYM
- 13. WOMENS GYM
- 14. YARD
- 15. SECURE HOUSING POD MALE
- 16. FORENSIC GARAGE
- 17. MECHANICAL
- 18. SECURE HOUSING FEMALE
- 19. SALLY PORT
- 20. COURT
- 21. SECURITY
- 22. PUBLIC TOILETS
- 23. OFFICE SPACE
- 24. LOBBY



FIRST FLOOR

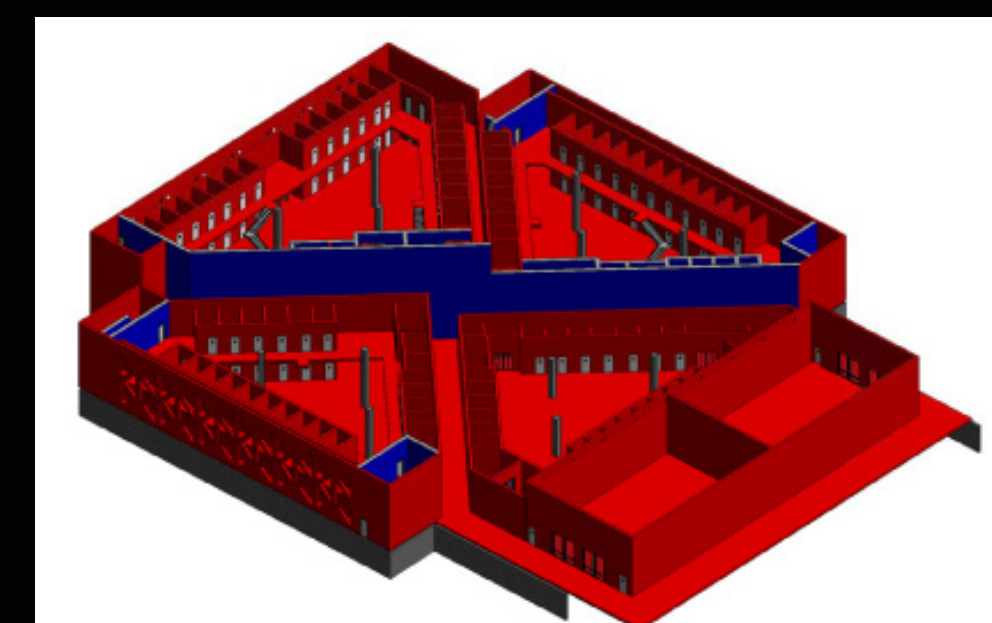


SECOND FLOOR



THIRD FLOOR

FLOOR PLANS

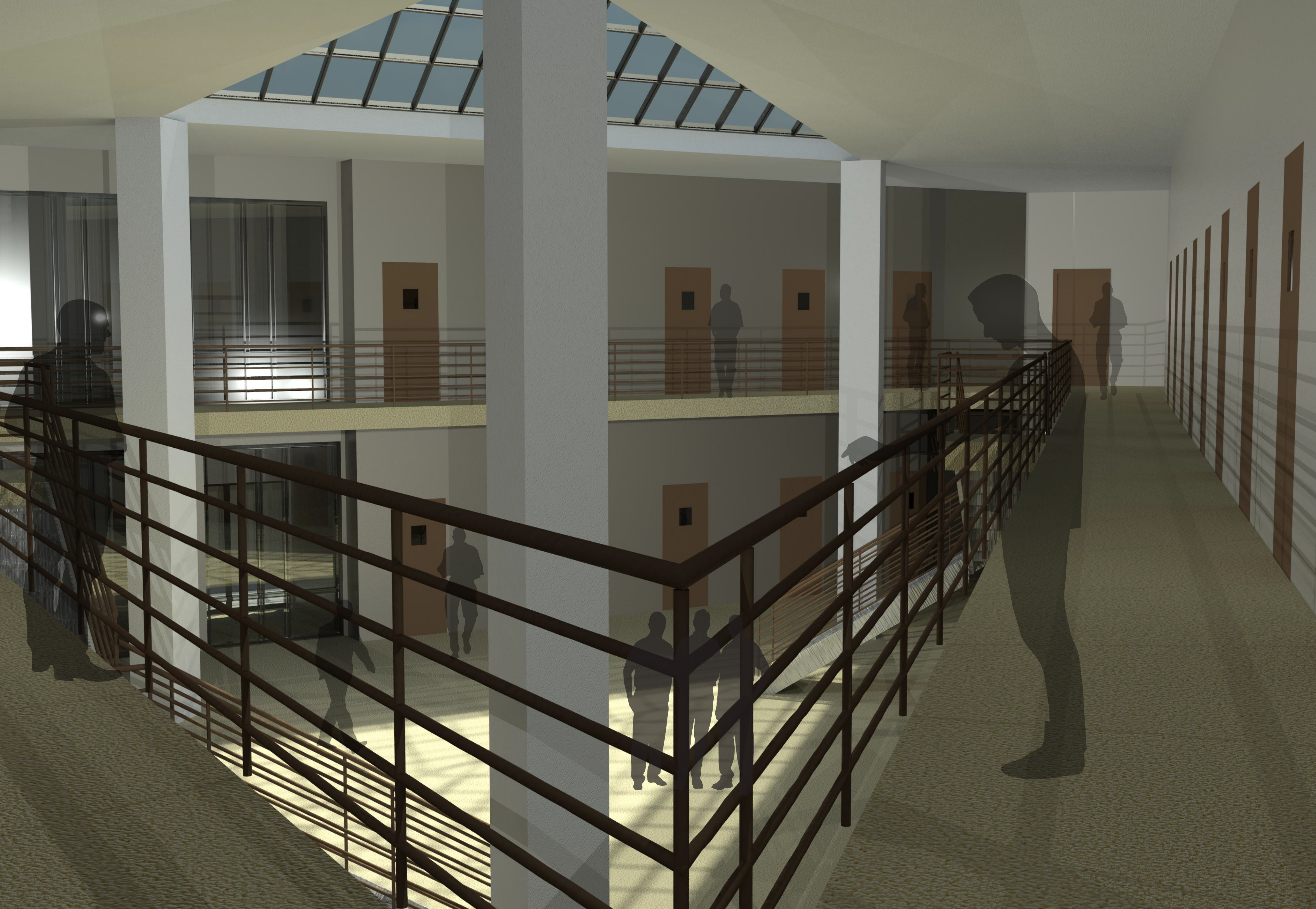




## RESEARCH: BOOKING AND PERSONAL STORAGE







## SECURE HOUSING POD

ONCE THE BOOKING PROCESS HAS BEEN COMPLETED, THE PRISONER SHOWERS, EXCHANGES PERSONAL CLOTHING FOR THE REQUIRED ATTIRE OF THE FACILITY, AND ARE MOVED TO THE APPROPRIATE LEVEL OF SECURE HOUSING. THIS POD IS WHERE THEY WILL SERVE THE MAJORITY OF THEIR SENTENCE. THE FACILITY HAS BEEN DESIGNED ALLOWING FOR MINIMAL MOVEMENT OF THE PRISONERS TO OTHER LOCATIONS IN THE FACILITY. THIS ALLOWS FOR MINIMAL CONTACT OF INMATES WITH DIFFERING DEGREES OF SECURITY AND NO CONTACT WITH ANY INMATE OF THE OPPOSITE SEX. THIS ENCOURAGES A LOWER RATE OF VIOLENCE AND CONTROL FOR THE OFFICER THAT IS PROVIDING DIRECT SUPERVISION TO THE CELL POD.

THE PRECAST CONCRETE CELL UNITS ARE MANUFACTURED TO PROVIDE 12" WALLS AND FLOOR DECKING IN ONE UNIT. STEEL MESH AND REBAR ARE INSERTED INTO THE CONCRETE DURING PRODUCTION, BASED ON THE SECURITY NEEDS OF THE UNIT. EACH INDIVIDUAL CELL HAS BEEN DESIGNED WITH FROSTED POLY-CARBONITE GLASS BLOCK OPENINGS, TO ALLOW NATURAL LIGHT TO PENETRATE INTO THE CELL BY TAKING ADVANTAGE OF NATURAL LIGHTING AVAILABLE THROUGH THE MAINTENANCE CORRIDOR.

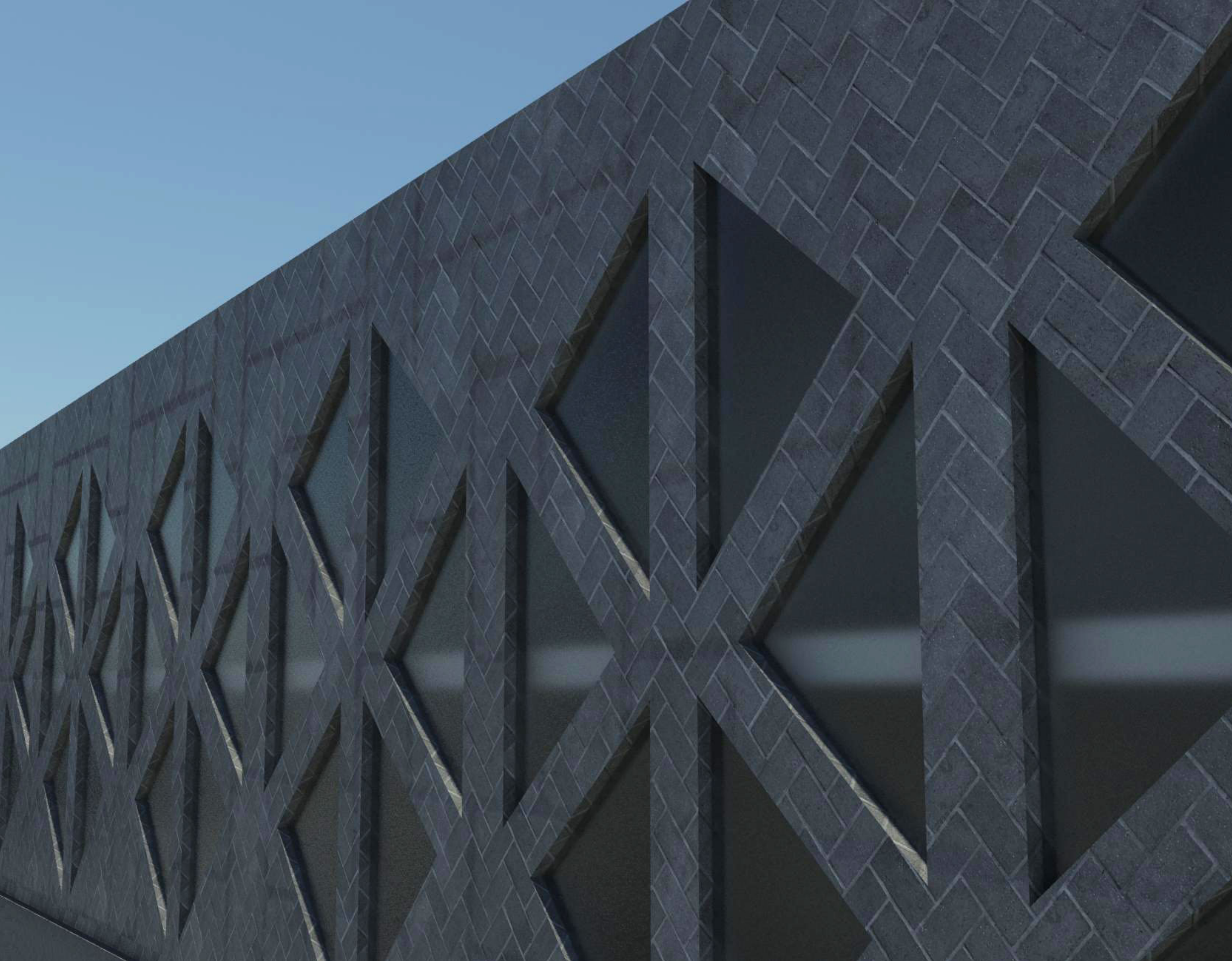




## RESEARCH: SECURE HOUSING AND COMMON AREA







THE TRIANGULAR OPENINGS ARE DESIGNED TO BRING INTEREST AND SURPRISE TO THE FACADE OF THE STRUCTURE. MORE IMPORTANTLY, THEY ARE A SOURCE OF NATURAL LIGHT INTO THE SERVICE CORRIDORS OF THE FACILITY, WHICH THEN FILTERS LIGHT INTO THE INDIVIDUAL CELLS THAT SHARE THE ADJOINING WALL. THE GREY HARRINGBONE BRICK HAS BEEN TURNED ON A 45 DEGREE ANGLE TO CONTINUE THE TRIANGULAR PATTERN THROUGH OUT THE FACILITY.





## ARRIVAL FOR THE GENERAL PUBLIC

I SPECIFICALLY CHOSE TO DISPLAY THE FACILITY IN THE ENVIRONMENT IN WHICH IT WILL SIT FOR AT LEAST 6 MONTHS OUT OF THE YEAR, THE COLD BLEAK WINTER MONTHS OF THE DAKOTAS, SEEM TO PARALLEL THE THOUGHTS MOST INDIVIDUALS HAVE WITH THE INTERIOR OF PRISONS. THE HARSH REALITY IS THAT THE PRISON OF THE PAST ARE JUST THAT, COLD AND BLEAK! I CHOSE A LESS INHUMANE APPROACH TO THE REHABILITATION PROCESS. THE NATURE OF THE FACILITY DEMANDS RESPECT AND SECURITY, BUT CAN AT THE SAME TIME OFFER SOME WARMTH AND UNDERSTANDING.

THE TRIANGULAR OPENS REPEAT THE GEOMETRY OF THE STRUCTURE AND BRING A SURPRISE TO THE FACADE. I HAVE CHOSEN TO UTILIZE ALUCA BOND SANDWICH PANELS MADE FROM ANODIZED ALUMINUM TO CONTRAST WITH THE BRICK. MAINTENANCE WILL BE MINIMAL, AND PROVIDE DURABILITY AND LONGEVITY FOR THE FACILITY. OPERABLE, ANODIZED ALUMINUM WINDOWS HAVE BEEN USED IN THE OFFICE SUITES FOR AIR CIRCULATION WHICH CAN BE CONTROLLED BY THE INDIVIDUAL EMPLOYEE.

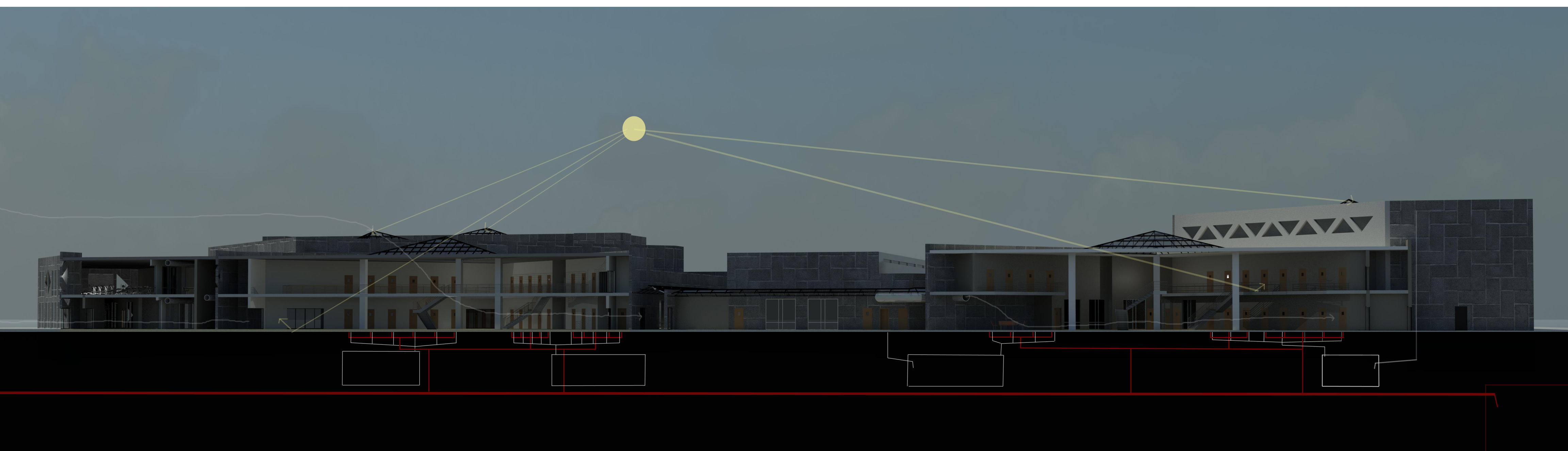




## RESEARCH: VISITATION







## PROPOSED SYSTEMS

THE CORRECTIONAL FACILITY HAS BEEN DESIGNED TO BE SELF CONTAINED. THE WATER FROM THE ABUNDANT LAKE WILL BE USED TO PROVIDE ALL THE HEATING AND COOLING NEEDS, ALSO THE WATER REQUIRED FOR DAILY LIVING AND KITCHEN AND LAUNDRY PURPOSES.

PUMPS WILL BRING WATER TO THE SITE FROM UNDER THE HIGHWAY, LARGE FILTRATION SYSTEMS WILL FILTER THE WATER THAT WILL THEN BE DISPERSED INTO HOLDING TANKS. RAINWATER WILL BE COLLECTED FROM ROOF DRAINS ON EACH ROOF INTO HOLDING TANKS UNDER THE GROUND, AS WILL GREY WATER FROM SINKS AND SHOWERS. SEWAGE WILL BE ALSO BE HANDLED IN HOLDING TANKS, TREATED, FILTERED AND REUSED.

A LARGE WIND TURBINE WILL SIT ON THE BLUFF IN THE SOUTHEAST CORNER OF THE SITE, UTILIZING THE NORTHWEST WINDS THAT COME DIRECTLY OFF THE LAKE.

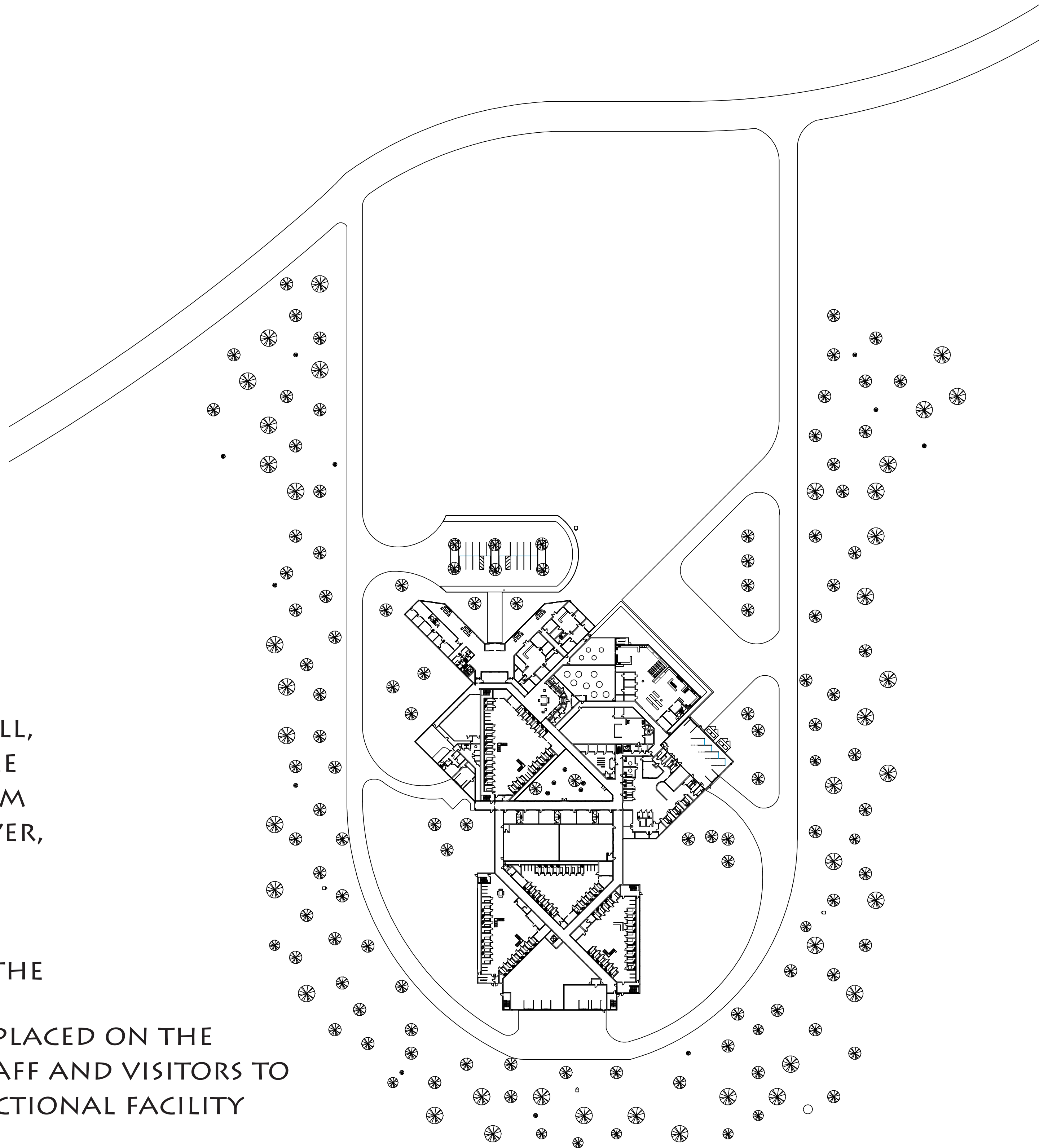
## SITE PLAN

SITE SELECTION FOR A CORRECTIONAL FACILITY CAN BE A COMPLICATED, A POLITICAL NIGHTMARE. MOST, IF NOT ALL, RESIDENTS OF A COMMUNITY WILL AGREE THAT A FACILITY TO DETAIN AND REFORM CRIMINALS IS NECESSARY. THAT HOW EVER, IS WHERE THE AGREEMENT ENDS. THE GUIDELINES DIRECTED BY THE FEDERAL GOVERNMENT AND THE ANTICIPATED OUTCRY FROM THE COMMUNITY MAKE THE POSSIBLE OPTIONS, MINIMAL.

I ENVISIONED A FACILITY CAREFULLY PLACED ON THE SITE ALLOWING FOR A VIEW FOR THE STAFF AND VISITORS TO ENJOY. NOT ALL ASPECTS OF THE CORRECTIONAL FACILITY NEED LOOK LIKE A PRISON.

A SYSTEM OF OPERABLE SKYLIGHTS HAVE ALLOWED FOR NATURAL LIGHTING AND VENTILATION IN THE AREA THAT REQUIRES ADDITIONAL SECURITY MEASURES. I FEEL STRONGLY THAT NATURAL LIGHTING IS IMPORTANT TO THE REHABILITATION PROCESS AND A NEEDED PHYSICAL BOOST.

DUE TO THE NATURE OF THE FACILITY, THE PUBLIC ACCESS IS LIMITED. A LOBBY AND VISITATION SPACE HAS BEEN PROVIDED, AS WAS A SPACE FOR THE CHILDREN OF THE INMATES TO ENJOY AS THEY SPEND TIME THERE ALSO. AN AREA FOR PAYMENT OF FINES WILL BE THE EXTENT OF THE PUBLIC ASSESSES.





# CONCLUSION

CAN RECIDIVISM BE INFLUENCED BY ARCHITECTURE?

I BELIEVE THE ANSWER IS YES.

BY DESIGNING THE FACILITY UTILIZING DIRECT SUPERVISION OF THE INMATES, RESEARCH HAS PROVEN IT TO BE THE NUMBER ONE REASON FOR NOT RETURNING TO A LIFE OF CRIME.

PROVIDING AN ATMOSPHERE WHICH HOUSES INMATES OF EQUAL SECURITY LEVELS TOGETHER, NOT BEING INFLUENCED BY WORSE OFFENDERS.

PROVIDING NATURAL LIGHTING INTO THE HOUSING PODS THUS LESSENING DEPRESSION OF INMATES.

SURROUNDINGS THAT ENCOURAGE SELF WORTH AND RESPECT.